# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/997,194 | 11/29/2001 | Steven Michael Grimm | 1719.0030004 | 4005 |

| | |
|---|---|
| 7590       03/31/2006 | EXAMINER |
| LOUIS M. HEIDELBERGER, ESQ. | DINH, DUNG C |

LOUIS M. HEIDELBERGER, ESQ.
REED SMITH LLP
2500 One Liberty Place
1650 Market Street
Philadelphia, PA 19103

| ART UNIT | PAPER NUMBER |
|---|---|
| 2153 | |

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| | 09/997,194 | GRIMM ET AL. |
| **Office Action Summary** | Examiner | Art Unit | |
| | Dung Dinh | 2153 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.
2a)☐ This action is **FINAL**.      2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-20* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *29 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/7/02*.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

## DETAILED ACTION

Claims 1-20 are present for examination.


### *Priority dates*

The present invention is filed 11/29/2001.  The present

application claims priority to:

09/578,683 filed 5/26/2000;

08/821,279 filed 3/20/1997; and

60/013,812 filed 3/21/1996.

Current claims 11-15 recited establishing a match for voice

and data, and application supporting voice and data.  This

feature is not disclosed in the specification of any of the

prior parent applications.  Therefore, the limitation of data

and voice application in claims 11-15 only entitles to the

filing date of the present application - 11/29/2001.


### *Objection to the Specification*

The following is a quotation of the first paragraph of 35

U.S.C. 112:

> The specification shall contain a written description of the invention, and
> of the manner and process of making and using it, in such full, clear,
> concise, and exact terms as to enable any person skilled in the art to
> which it pertains, or with which it is most nearly connected, to make and
> use the same and shall set forth the best mode contemplated by the inventor
> of carrying out his invention.

The specification is objected to because the detail disclosure does not have a written description for the limitation of application supporting voice and data as claimed in claims 11-15.  Correction is required.

### *Claim Rejections - Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.  See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application.  See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer.  A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,894,556.**  Although the conflicting claims are not identical, they are not patentably distinct from each other because they recite essentially equivalent limitations.

| Current Application Claim 1 | Patent 5,894,556 Claim 1 |
|---|---|
| method for establishing peer-to-peer match of clients ... | method for a match maker to match an additional computer ... with a first existing computer |
| receiving at least one offer ... from an offering peer client, and | *(first existing computer)* having previously communicated to the match maker a desire to match ... |
| recording at least one attribute associated with said offer using at least one offer record; | *(inherent in order for the match maker to remember that the first existing computer has a previously communicated an offer)* |
| receiving a measurement of at least one communication link property between the offering client and an inquiring client; | (c) measuring, ...prior to matching ... at least one communication attribute between said additional computer and said first existing computer; *(The match maker inherently would have received the measurement in order to perform* |

| | |
|---|---|
| | *the match decision.)* |
| comparing said offer record with said measured at least one link property to determine if a peer to peer match between said offering and said inquiring clients is to be permitted. | (d) selecting said first existing computer as a match to said additional computer based on a comparison of said at least one communication attribute measured ... |

## *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

**Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearlman US patent 5,586,257 and further in view of Scott Coleman "Re: ifrag server", Usenet posting to rec.games.computer.doom.misc 04/23/1995 and Alec Habig "Re: 'Normal' lag?!?", Usenet posting to rec.games.netrek 6/22/1995.**

As per claim 1, Perlman teaches method for establishing peer-to-peer match of clients, comprising:

receiving at least one offer from an offering peer client (col.10 lines 64-68), and recording at least one attribute associated with the offer in an offer record (e.g. a particular game and address of the offering computer and other attributes, see col.11 lines 7-24);

comparing said offer record to determine if a peer to peer match between an offering and an inquiring clients is to be permitted. (col.11 lines 7-24).

Pearlman does not disclose receiving a measurement of at least one communication link property between the offering client and an inquiring client and matching based on comparison of the measured link property. Pearlman matches based on area code and makes direct modems connection between the clients. (Col.11 lines 35-32). Direct modem connection permits connection of only two machines to play. However, the trend at the time of the invention was to play with multiple players over the Internet. It is known at the time of the invention that communication link properties such as latency, packet loss, etc. between the players effect playablity of the game over the Internet (see A3 on page 2 of Scott Coleman "Re: ifrag server" and Alec Habig's posting). Coleman discloses a Frag Tracker

server that maintains a list of players and location and enable

players to find each other and to directly connect to each

others (peer-to-peer) to play over the Internet. (see page2 A3).

It would have been obvious for one of ordinary skill in the art

to combine the Frag Tracker with Pearlman teaching because it

would have enabled players to find and play with multiple other

players over the Internet.  It would have been obvious that

Pearlman as modified would include the determination of the

communication link properties (i.e. ping, packet loss, etc)

between the players in order to match players that are near each

other.

As per claim 2, Pearlman and Coleman teach launching

application to permit peer to peer communication between the

clients (Pearlman col.11 line 60 to col.12 line 32 -direct modem

connection between the players.  Coleman page 2 A3: ... "Once the

game actually begins, ... the ONLY traffic generated ... is

between the machines involved in the game."

As per claim 3, Pearlman teaches launching application

allowing direct peer to peer communication after a predetermined

number of inquiring clients are deemed allowable matches (two - A

and B, col.11 lines 7-24).

As per claim 4, Pearlman teaches comparing offering record

with link property (col.11 lines 7-24: area code and telephone

number and other information). It would have been obvious in

Pearlman as modified to include communication link property in the

offering record to determine peer match because it would have

enabled an offering player to specify link property such as how

much latency he is willing to tolerate.

As per claim 5, it is well known in the art that link

properties relevant for playing game include bandwidth, latency,

and packet loss (see Alec Habig's posting).

As per claim 6, it is rejected under similar rationale as for

claim 1 above. It would have been obvious in Pearlman as modified

to include communication link property in the offering record to

determine peer match because it would have enabled an offering

player to specify link property such as how much latency he is

willing to tolerate.

As per claim 7, Pearlman does not disclose measuring link

properties between the clients before initiate the peer to peer

match. However, it would have been obvious in Pearlman as

modified to measure the link properties between the clients before

initiating the peer to peer match in order to ensure that the

links between clients are within desired parameters.

As per claim 8, Pearlman does not disclose attribute include

instance and class attribute. Official notice is taken that it is

well known in the art at the time of the invention to use object

oriented programming.  The advantages of object oriented
programming are well known in the art.  Instance and class
attribute are known properties of object oriented programming.
Hence, it would have been obvious for one of ordinary skill in the
art to implement Pearlman as modified using objected oriented
programming because it provided better management of the software
lifecycle for example.

As per claim 9, it is inherent that Pearlman as modified
would have included code in the client for measuring link
properties (a ping program for example).

As per claim 10, It is apparent from Pearlman teaching that
the code for recording offer, code for recording link performance
and code for comparing are part of an application (col.11 lines 7-
24, the software on the server for performing the matching of the
players).

As per claims 11-15, they are rejected under similar
rationale as for claims 1-5 above.  Pearlman does not disclose the
application supporting voice and data.  Games supporting both
voice and data are well known at the time of the filing of the
current application.  The matching function of Pearlman as
modified is independent of the type of application.  Hence, the
type of application used clearly would have been a matter of
choice of the players.  It would have been obvious for the players

to use an application (game) supporting voice and data

communication because it would have enable the players to verbally

communicate while playing the game with each others.


As per claim 16, it is rejected under similar rationale a for

claim 1 above.  Pearlman and Coleman does not specifically

disclose matching offering client to game server.  Official notice

is taken that it is known at the time of the invention to have

multiplayer games that permit a player machine to act as a server

to host a game for others to join in (e.g. DOOM, Descent, etc.).

Hence, it would have been obvious for one of ordinary skill in the

art to match offering clients to game servers (e.g. players who

are hosting games) so as to enable the system to match clients who

want to join a game with players who are hosting a game.

As per claim 17, Pearlman and Coleman teach instantiating the

application to permit communication between the players (Pearlman

col.11 line 60 to col.12 line 32 -direct modem connection between

the players.  Coleman page 2 A3: ... "Once the game actually

begins, ... the ONLY traffic generated ... is between the machines

involved in the game."

As per claim 18, It would have been obvious in Pearlman as

modified to select a plurality of servers to compare to the

request from the offering client because it would have enable the

system find a best possible matching server for the offering

client.

As per claim 19, Pearlman does not teach matching based on a

second measured link property. However, it is well known in the

art that link properties relevant for playing game include

bandwidth, latency, and packet loss (see Alec Habig's posting).

Hence, it would have been obvious for one of ordinary skill in

the art to match the players based on two or more links

properties to ensure a good link between the players.

As per claim 20, Pearlman does not teach deselecting one of

the server. This step is apparent in the matching process. It

would have been obvious to one of ordinary skill in the art to

deselect a server that does not meet the matching criteria in

order to reduce the number of candidate servers to a few or one
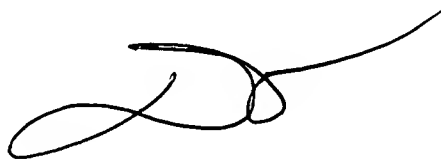
best server.

### Conclusion

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Dung Dinh
whose telephone number is (571) 272-3943. The examiner can
normally be reached on Monday-Friday from 7:00 AM - 3:00 PM.
If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Glenton Burgess can be
reached at (571) 272-3949.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dung Dinh
Primary Examiner
March 22, 2006